

### DETAILED ACTION

1. This action is in response to the amendment filed on February 26, 2009. Claims 1-2, 5, 8-12, 14, 16, 18 and 21-26 are pending and have been considered below.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Scott Margo on March 26, 2009.

The claims in the application are amended as follows:

#### **In Claims:**

- (1) In claim 1, line 16; replace – **the** – between “**to**” and “**summation**” by - **a** -.
- (2) In claim 14; replace line 21 with – **symbols are transmitted via the same sub-carrier; –**.

### ***Allowable Subject Matter***

3. Claims 1-2, 5, 8-12, 14, 16, 18 and 21-26 are allowed.
4. The following is an examiner's statement of reasons for allowance: The prior art of record discloses a system and method for detecting intersymbol interference in

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OFDM systems and detecting the timing offset and correcting the boundary of the communication signals by using correlation values of the current signal symbol with previous symbol and with next symbol, but prior art fails to disclose that the first and second correlators for calculating the correlation values comprises a first conjugating circuit for computing a plurality of first conjugated values according to the specific signal of the current symbol, a multiplying circuit for generating a plurality of first product values according to the first conjugated values and the previous symbol and then a first calculation circuit generating plurality of first calculation values with the same sign according to the first product values of multiplication further a first summation circuit for generating the first correlation value according to the first calculation values.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Chen et al. (US 7,257,175) discloses a system and method for periodic signal detection in OFDM systems.
  - b. Liu et al. (US 7,391,828) discloses a symbol boundary detection device and method for OFDM communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is (571) 270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off) 8:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./  
Examiner, Art Unit 2611  
/Shuwang Liu/  
Supervisory Patent Examiner, Art Unit 2611